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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,401	11/19/1999	SAID ZAMANI-KORD	10991745-1	7179

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EXAMINER

NGUYEN, KIMBERLY T

ART UNIT	PAPER NUMBER
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1774

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DATE MAILED: 12/12/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/443,401

Applicant(s)

ZAMANI-KORD ET AL.

Examiner

Kimberly T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 15-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, drawn to a machine-readable indicia bearing substrate structure, classified in class 428, subclass 195.
- II. Claims 15-28, drawn to a print medium encoded with information bearing indicia, classified in class 283, subclass 110.
- II. Claims 29-31, drawn to a method of reading data encoded on print media, classified in class 427, subclass 288.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a separate fluorescent coating structure and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process as claimed can be practiced with another materially different product such as illuminating and detecting fluorescing signals in other products such as clothing, toys, and car paints.

Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process as claimed can be practiced with another materially different product such as illuminating and detecting fluorescing signals in other products such as clothing, toys, and car paints.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Larry K. Roberts on November 27, 2001 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-28 and 29-31 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Specification

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 8, line 9, the tape structure 136 is not shown in Figure 8. Correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is unclear how the indicia is "defined by" a fluorescent material.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Chatwin et al., U.S. Pat. No. 5,492,370.

Chatwin shows a machine-readable decorative article comprising a polyester substrate (column 6, lines 18-27), an opaque aluminum metallic coating (metal foil layer) (column 10, lines 34-38) or zirconium oxide film (column 10, lines 60-65) provided upon the substrate, an indicia-receptive coating provided upon the metallic coating or zirconium oxide film (column 4, lines 35-54), and a layer of fluorescent indicia (column 8, lines 19-29). Chatwin shows that the indicia receptive coating may be a black coating (black background) (column 14, lines 24-25). Chatwin further shows that the decorative article can be adhered to a surface of a windscreen glass (print medium) (column 11, lines 59-65), tax certificates (print medium) (column 12, lines 8-26), or incorporated into bank note threads (column 12, lines 61-67). Chatwin shows that *both* sides of the thread (substrate) may be embossed, metallised, and printed (column 12, lines 66-67). Further, Chatwin shows that portions of the polypropylene substrate film (substrate, print medium) is printed with security indicia (column 13, lines 37-41).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 7-8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatwin et al., U.S. Pat. No. 5,492,370 in view of Hiraishi et al., U.S. Pat. No. 4,780,391.

Chatwin is relied upon as above for claim 1.

Chatwin does not show reflective or absorptive radiation blocking materials dispersed within said substrate as in instant claim 7. Chatwin does not show that the substrate comprises first and second thin layers of substrate material with the interference preventing means sandwiched between the first and second thin layers as in instant claim 8.

Hiraishi shows a color-image recording material comprising a support and a combination of two or more layers containing microcapsules, white material, and colorants (Abstract). Hiraishi shows that the support can be made of a composite sheet made from materials such as metal foil (reflective blocking material), paper, various nonwovens, plastic films, and synthetic paper (column 6, lines 41-45). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the substrate of Applicants' invention which comprises metal foil because such a support is known in the art. In addition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a composite sheet of a combination of paper (first and second layers of substrate material) and an incorporation of metal foil (reflective layer). It would have been obvious to arrange the layers which are well known in the art in a manner that would result in an effective printed substrate.

Chatwin does not specifically show that the decorative article (substrate structure) further comprises a layer of a print medium in roll form wherein the decorative article is attached to a surface of the layer of the print medium as in instant claim 14. However, Chatwin shows multiple tax certificates which have edge punched sheets (column 12, lines 8-17). Chatwin

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further shows that the substrate can be in a roll form (column 6, lines 28-53). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a print medium in roll form with a substrate structure attached to the surface because one skilled in the art would know that the tax certificate sheets of Chatwin could be in roll form when it was printed due to the edge punched sheets.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chatwin et al., U.S. Pat. No. 5,492,370 in view of Mansukhani, U.S. Pat. No. 4,243,694.

Chatwin is relied upon as above for claim 1.

Chatwin does not show that the fluorescent material is a material which fluoresces energy at a wavelength between 200 and 1100 nanometers as in instant claim 10. Mansukhani shows an ink composition for use in ink jet processes to print on metals, plastics, or paper surfaces (Abstract). Manuskhani shows that the dye in the ink fluoresces in the range of from 500 to 700 nm (claim 6). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a material which fluoresces energy at between 200 and 1100 nm because such a range of wavelength for fluorescing dyes in ink jet articles is known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 305-5408 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kimberly Nguyen
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read "Cynthia H. Kelly", written over the printed name and title.